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Leveraging context to resolve identity in photo albums

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Proceedings of the 5th ACM/IEEE-CS joint conference on Digital libraries [table of contents](#)
Denver, CO, USA
SESSION: Tools & techniques track: automatically managing media [table of contents](#)
Pages: 178 - 187
Year of Publication: 2005
ISBN:1-58113-876-8

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Publisher [ACM](#) New York, NY, USA

Bibliometrics Downloads (6 Weeks): 9, Downloads (12 Months): 126, Citation Count: 7

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DOI Bookmark: Use this link to bookmark this Article: <http://doi.acm.org/10.1145/1065385.1065430>
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↑ ABSTRACT

Our system suggests likely identity labels for photographs in a personal photo collection. Instead of using face recognition techniques, the system leverages automatically available context, like the time and location where the photos were taken. Based on time and location, the system

automatically computes event and location groupings of photos. As the user annotates some of the identities of people in their collection, patterns of re-occurrence and co-occurrence of different people in different locations and events emerge. The system uses these patterns to generate label suggestions for identities that were not yet annotated. These suggestions can greatly accelerate the process of manual annotation and improve the quality of retrieval from the collection. We obtained ground-truth identity annotation for four different photo albums, and used them to test our system. The system proved effective, making very accurate label suggestions, even when the number of suggestions for each photo was limited to five names, and even when only a small subset of the photos was annotated.


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Note: OCR errors may be found in this Reference List extracted from the full text article. ACM has opted to expose the complete List rather than only correct and linked references.

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↑ INDEX TERMS

Primary Classification:

H. Information Systems



H.4 INFORMATION SYSTEMS APPLICATIONS



H.4.m Miscellaneous

General Terms:

Algorithms, Human Factors

Keywords:

context, face recognition, geo-referenced digital photos, photo collections

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